

Preliminary Amendment

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Applicant(s): Peixuan GUO et al.
Serial No.: Unassigned (*Int'l Appln No.: PCT/US 2003/039950*)
Filed: Herewith (*Int'l Appln Filed: 16 December 2003*)
For: pRNA CHIMERA

Amendments to the Drawings

Please enter the 30 sheets of formalized drawings submitted herewith. The 30 sheets included herewith replace the original sheets as published with International Application No. PCT/US 2003/039950.

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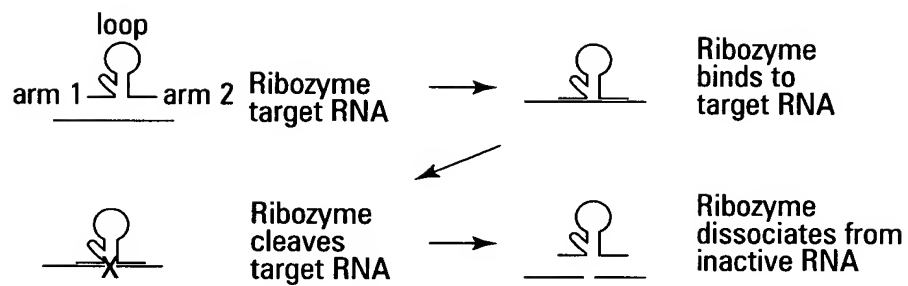


Fig. 1

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Wildtype pRNA

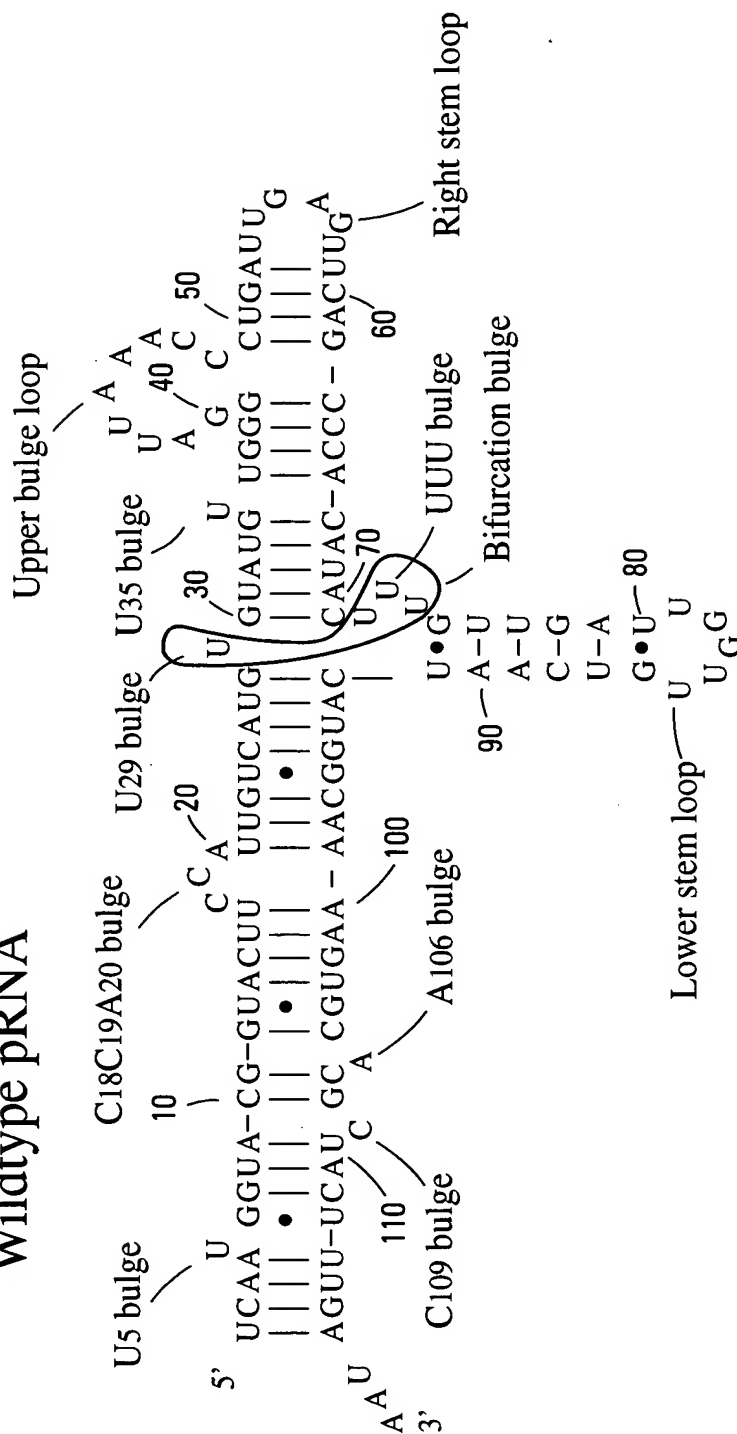


Fig. 2a

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pRNA sequence and secondly structure

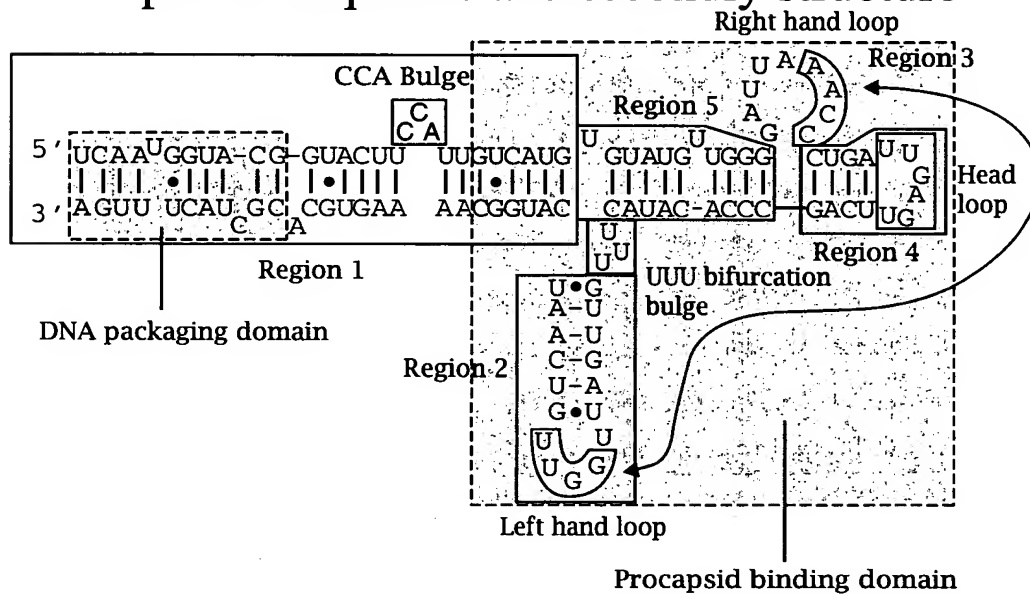


Fig. 2b

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Fig. 3a

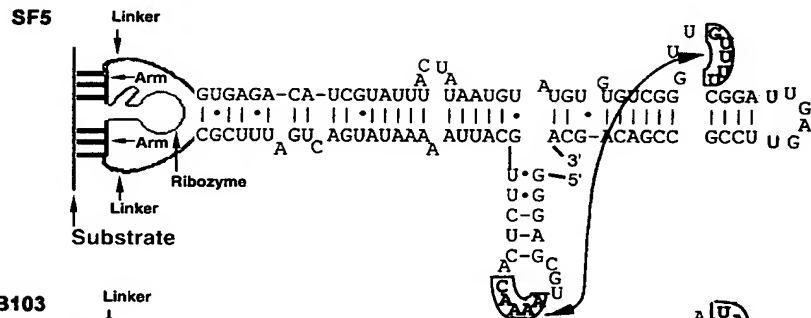


Fig. 3b

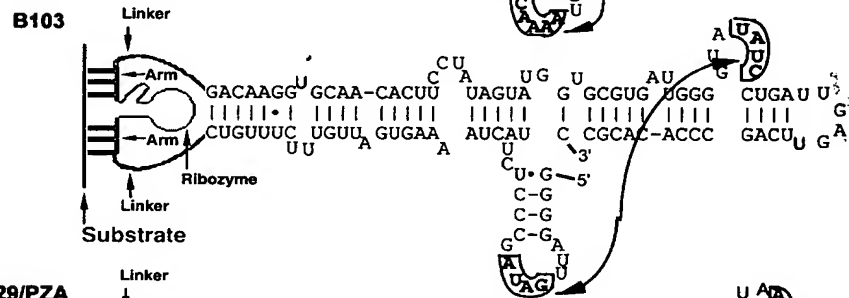


Fig. 3c

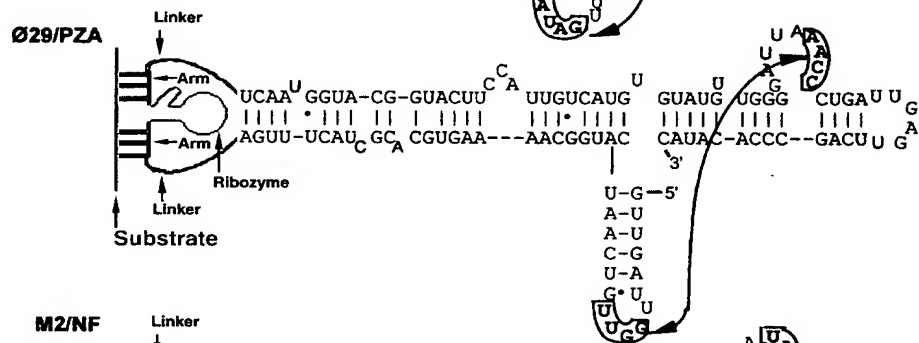


Fig. 3d

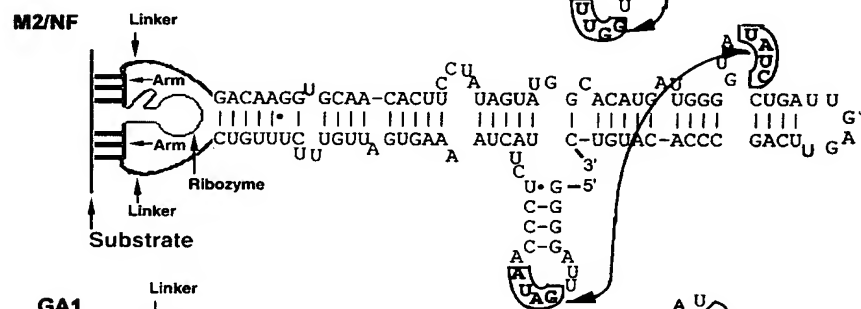


Fig. 3e

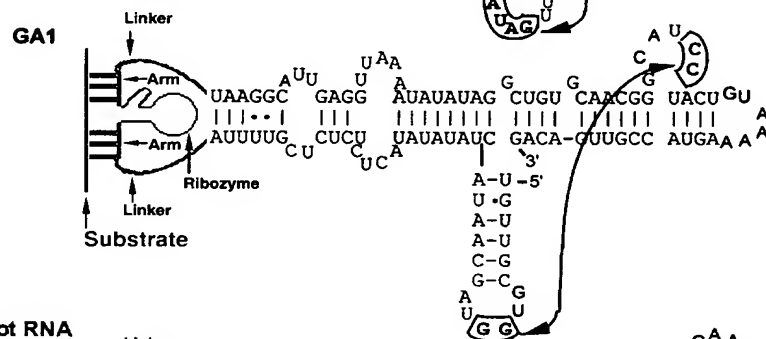
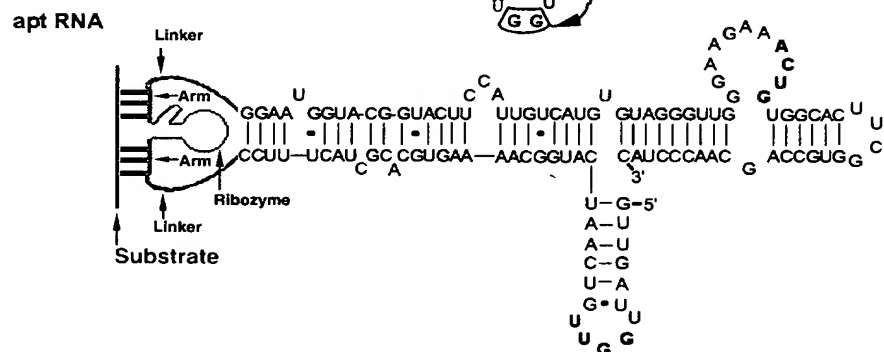
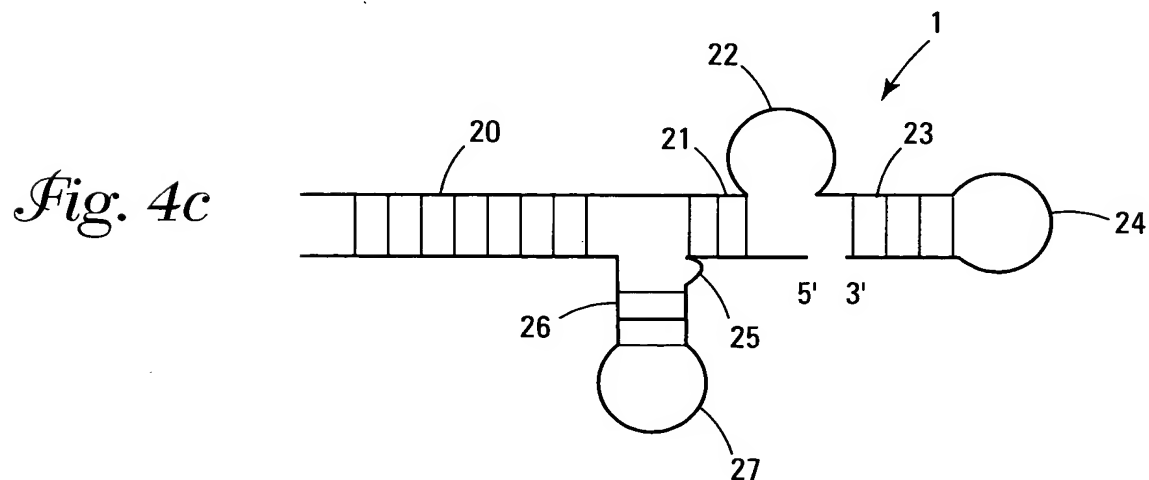
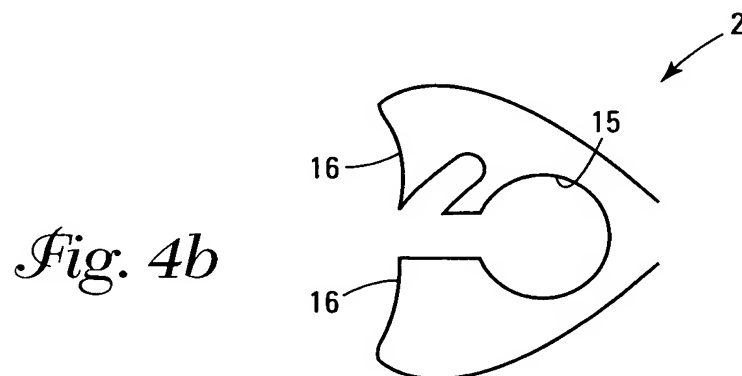
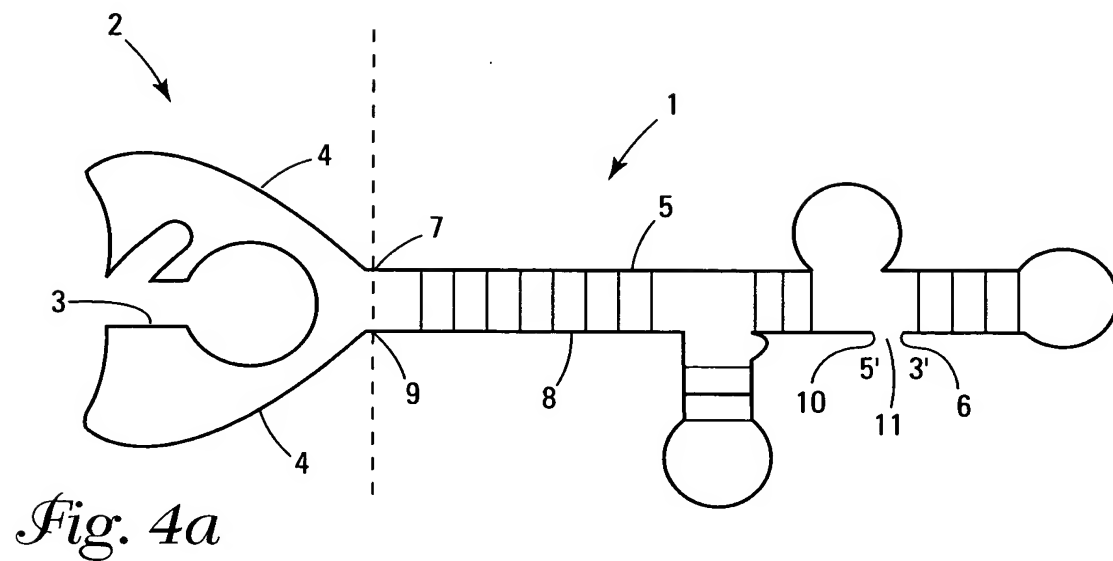


Fig. 3f



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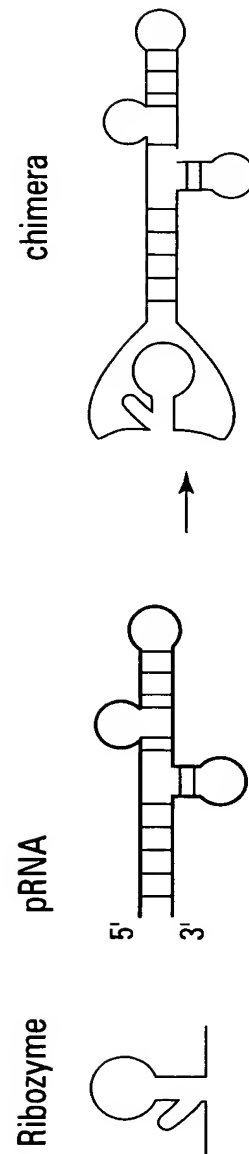


Fig. 5a

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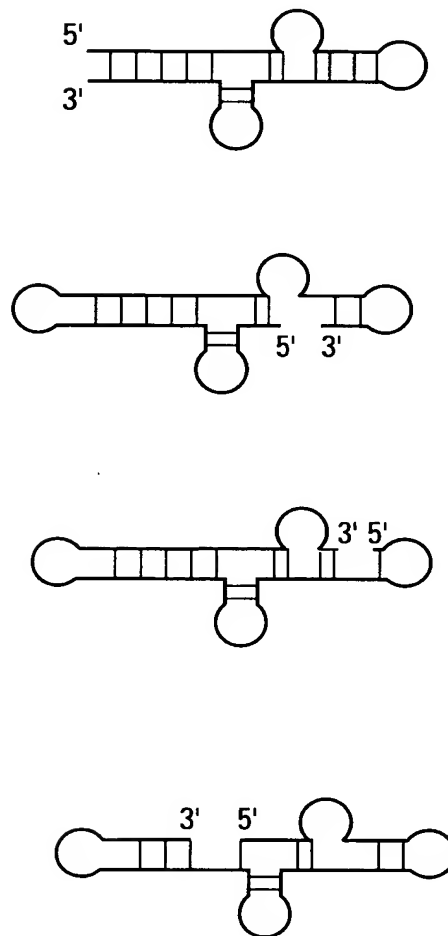


Fig. 5b

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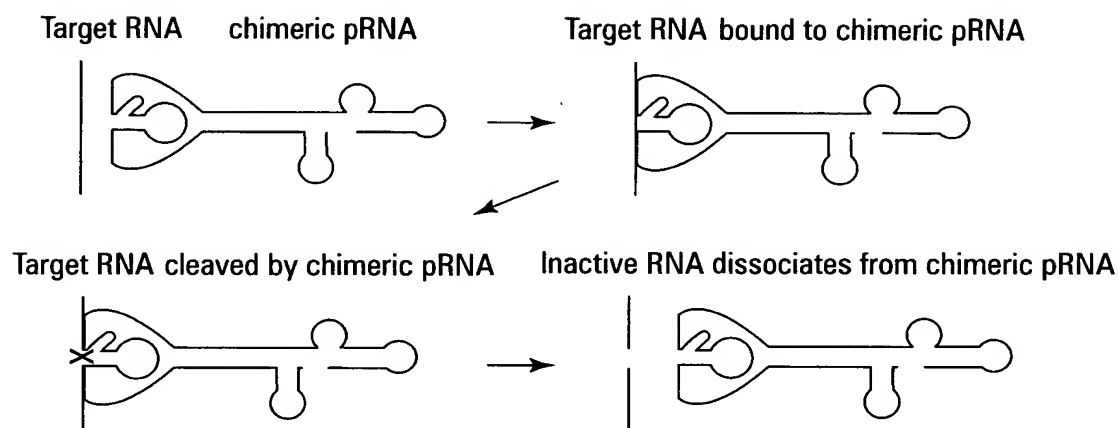


Fig. 6a

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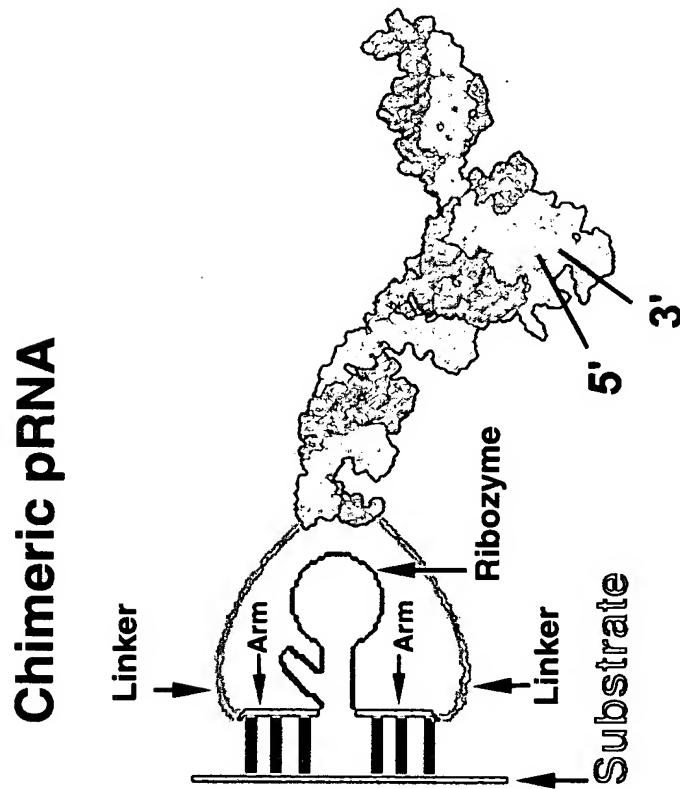


Fig. 6b

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Fig. 7a

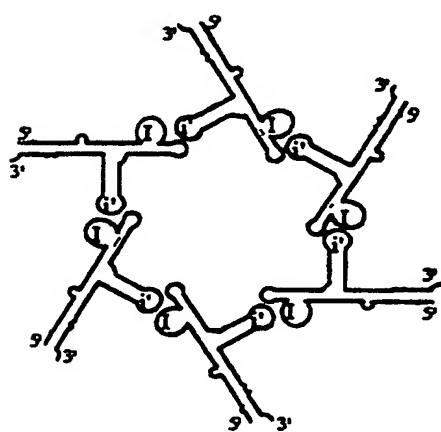
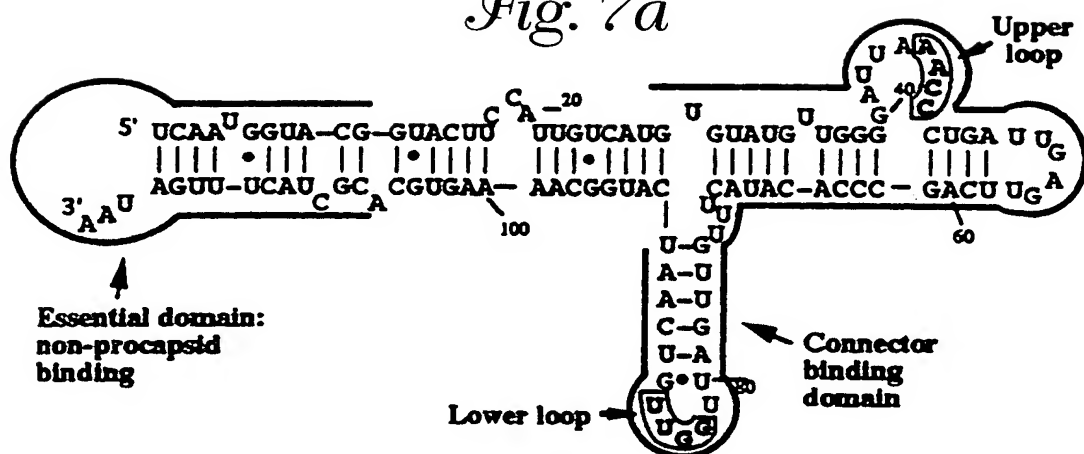


Fig. 7d

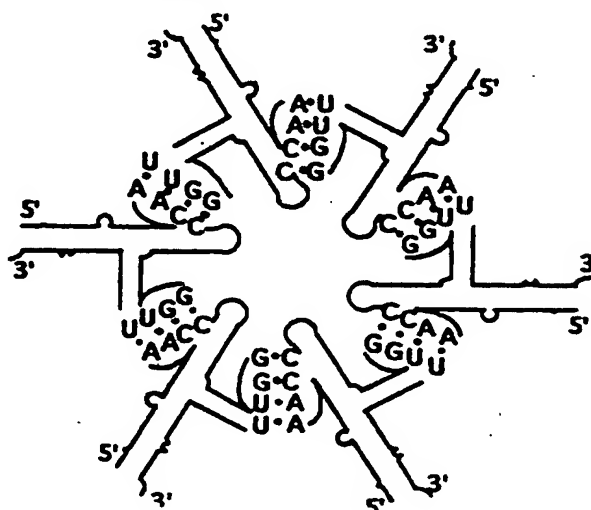


Fig. 7e

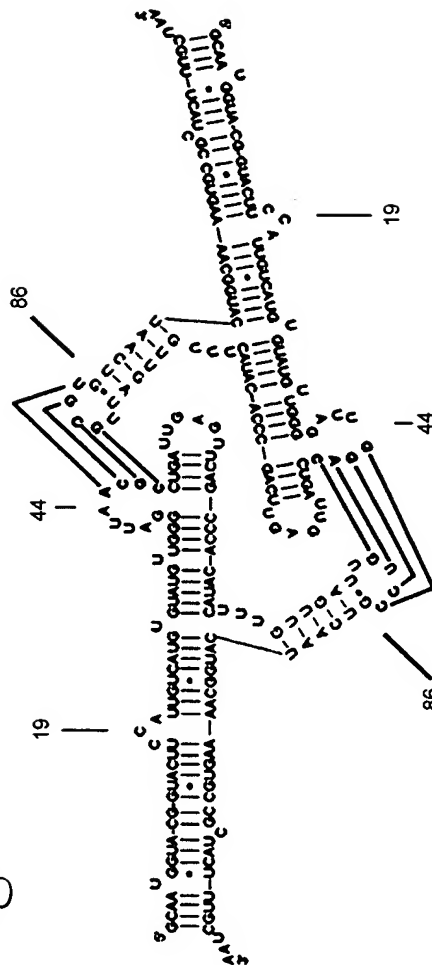
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Fig. 7c



Fig. 7b



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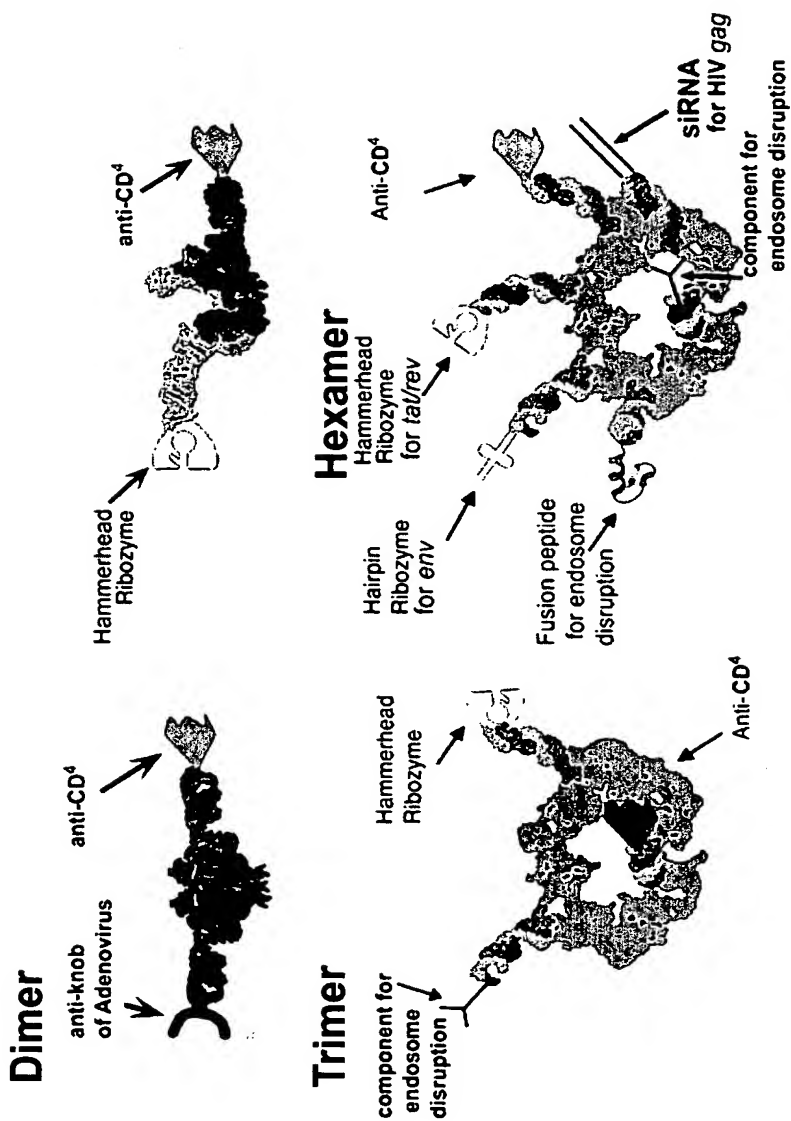


Fig. 8

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Fig. 9

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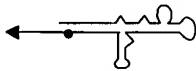
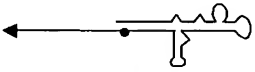
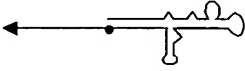
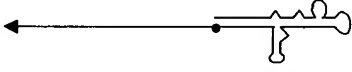
Name of RNA	Activity	Sequence of 3' overhang	3' overhang base number	Structure
Eco-pRNA	10^8	AA GCC GAA UU (SEQ ID NO:19)	10 bases	 3' overhang 10 bases
XbHi-pRNA	10^8	AAGCCGAAUUC AGCACACUGGCG GCCGUUACUAGU GGAUCCGAGCUC GGUACCAAGCU (SEQ ID NO:20)	59 bases	 3' overhang 59 bases
174-pRNA	10^8	CCUUUUACAUGC GACACAGACGAA GCGCUAAAACGU GGGAUUCUGUG UCGUUUU (SEQ ID NO:21)	54 bases	 3' overhang 50 bases
Di-RNA	10^8	UCAAUGGUACGG UACUUCCAUGU CAUGUGUAUGUU GGGGAUUAAACC CUGAUUGAGUUC AGCCCACAUACU UUGUUGAUUGGU UGUCAUCAUGG CAAAAGUGCACG CUACUUUGAUAA (SEQ ID NO:22)	120 bases	 3' overhang 120 bases

Fig. 10

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Fig. 11a Small loop inserted

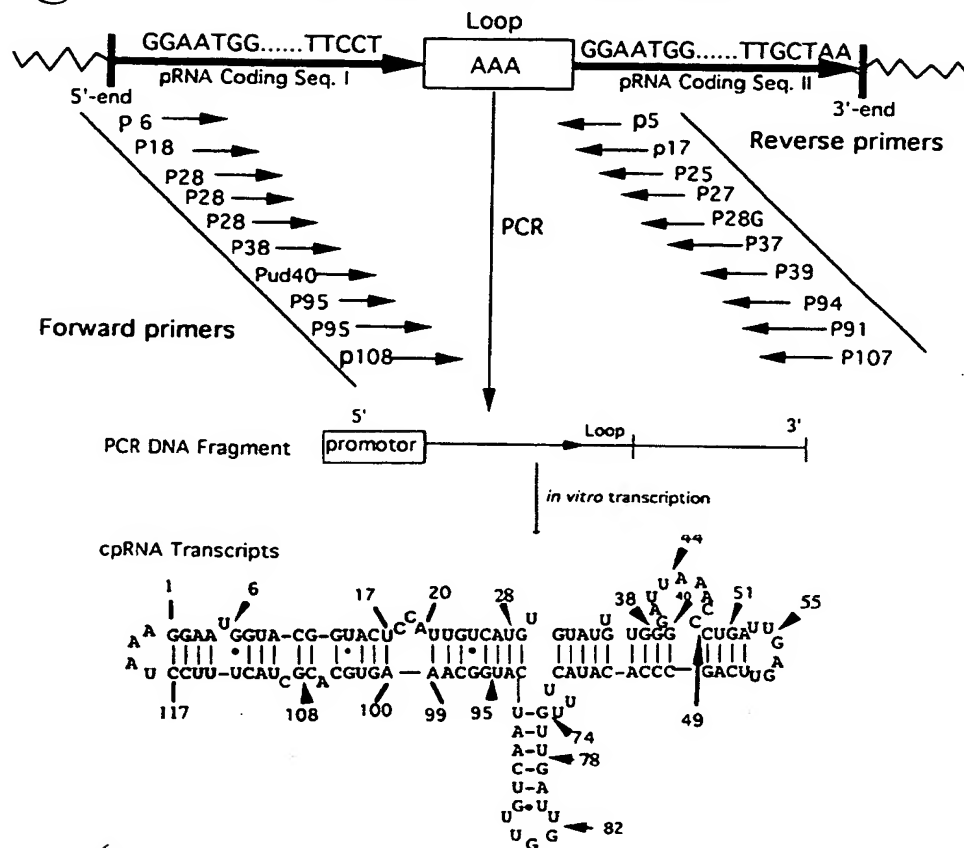
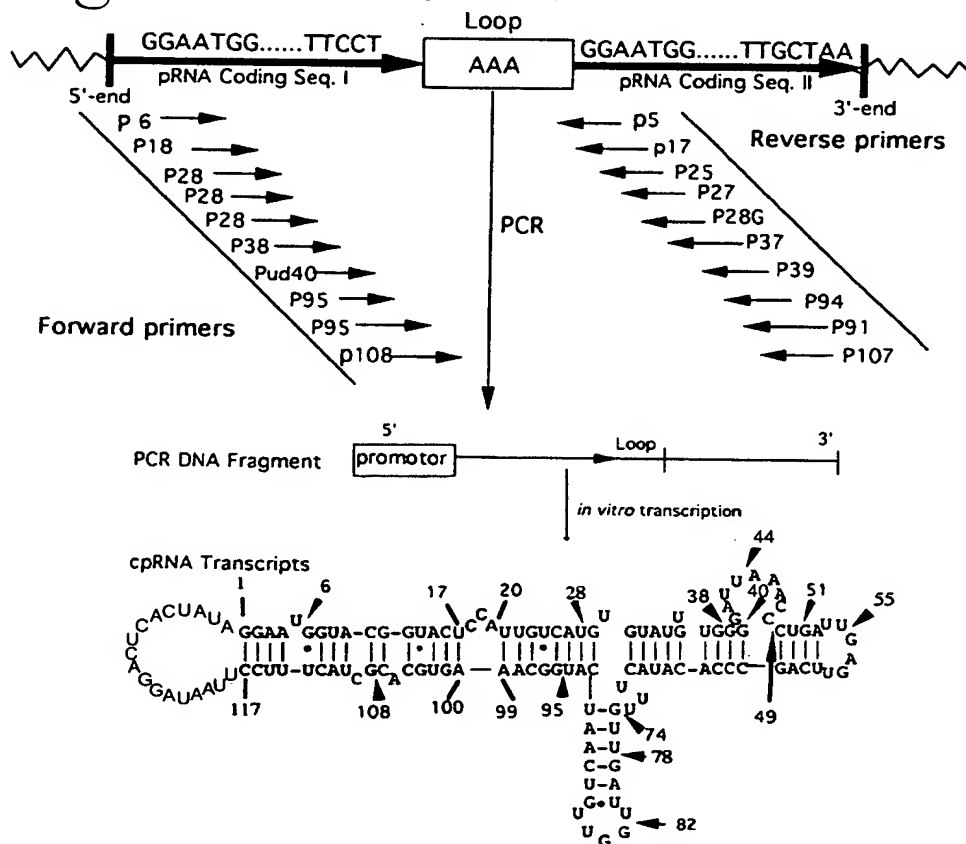


Fig. 11b Large loop inserted



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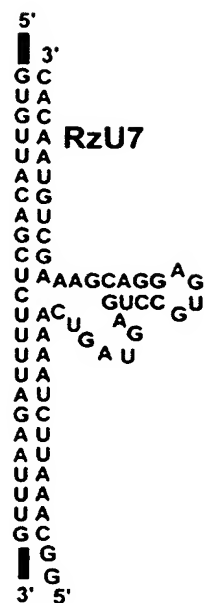


Fig. 13a

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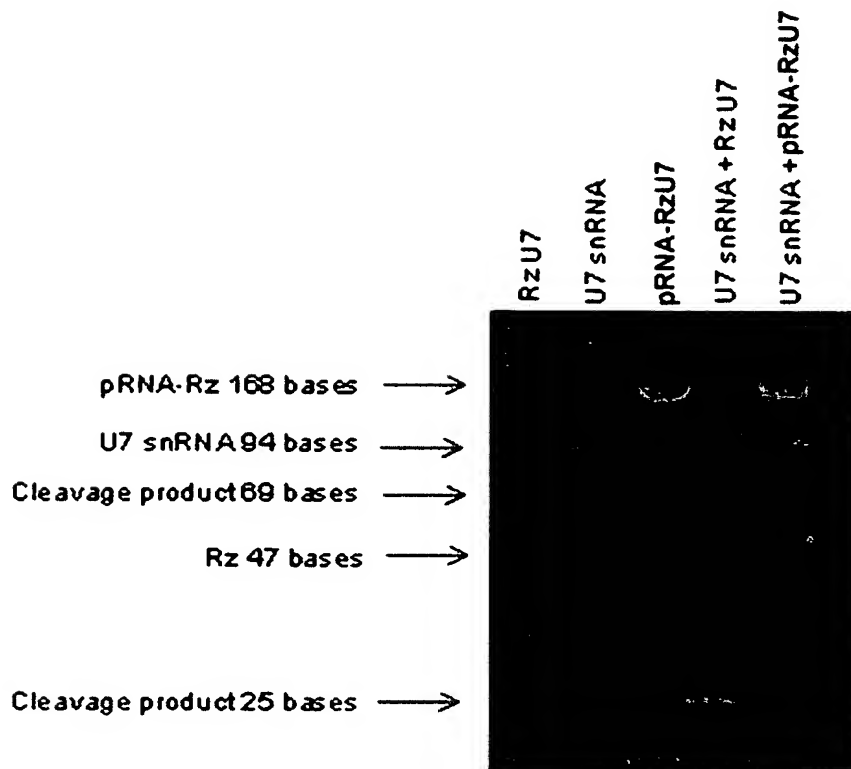


Fig. 13b

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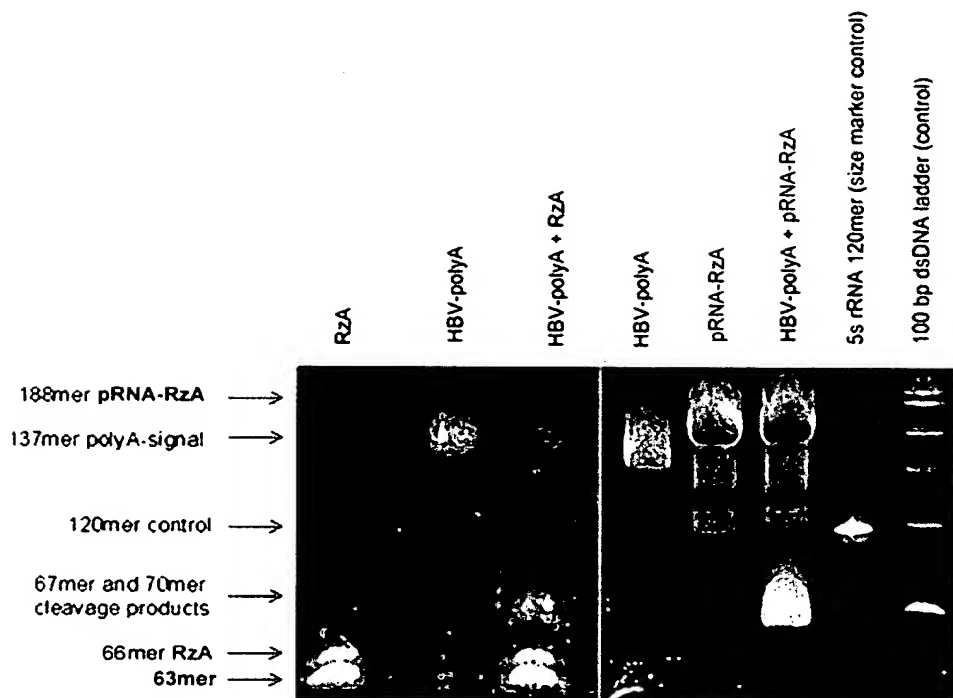
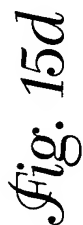
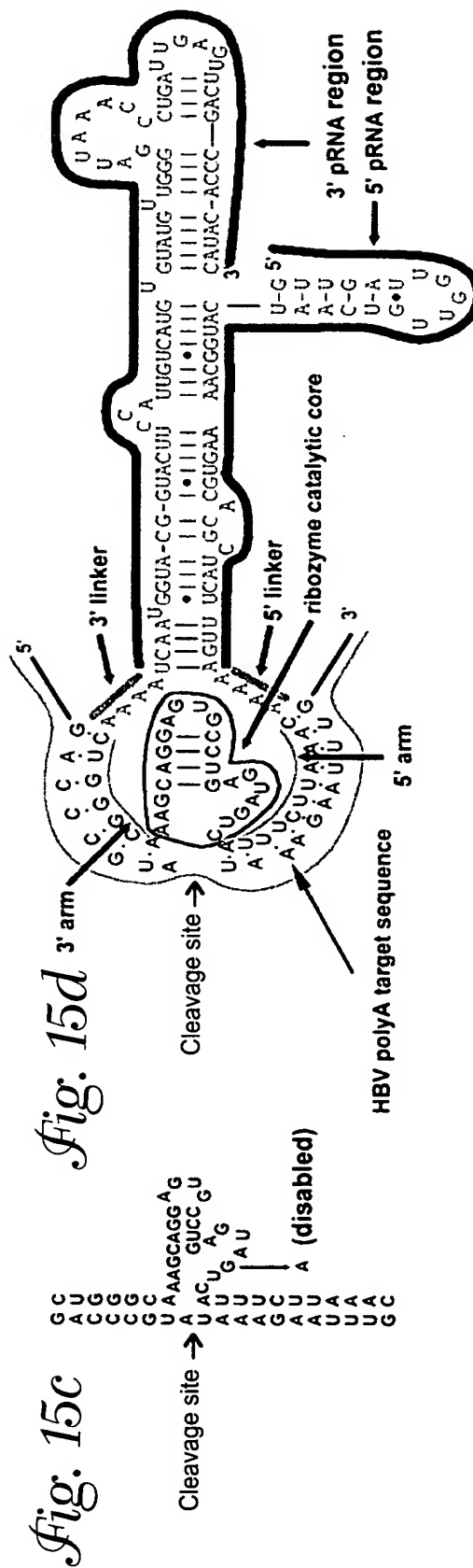
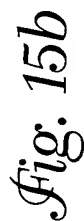
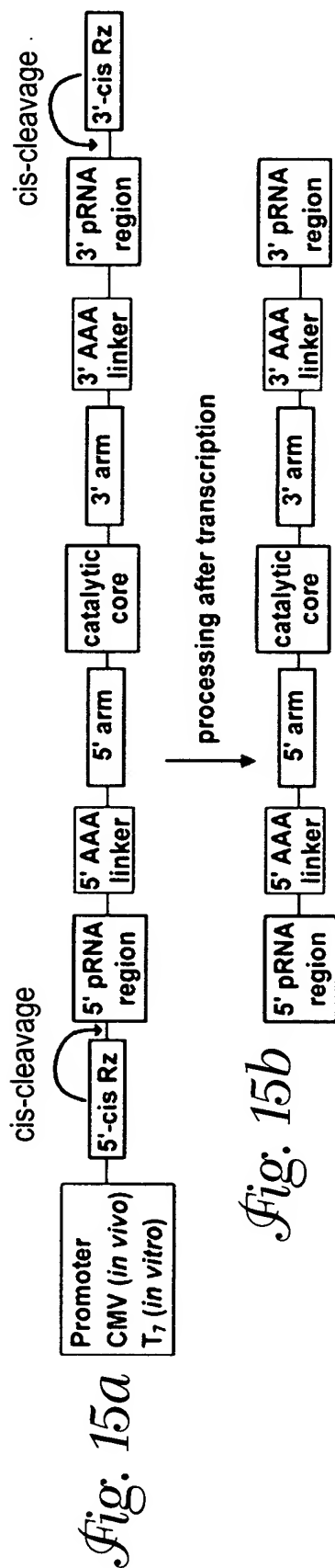


Fig. 14

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Fig. 16

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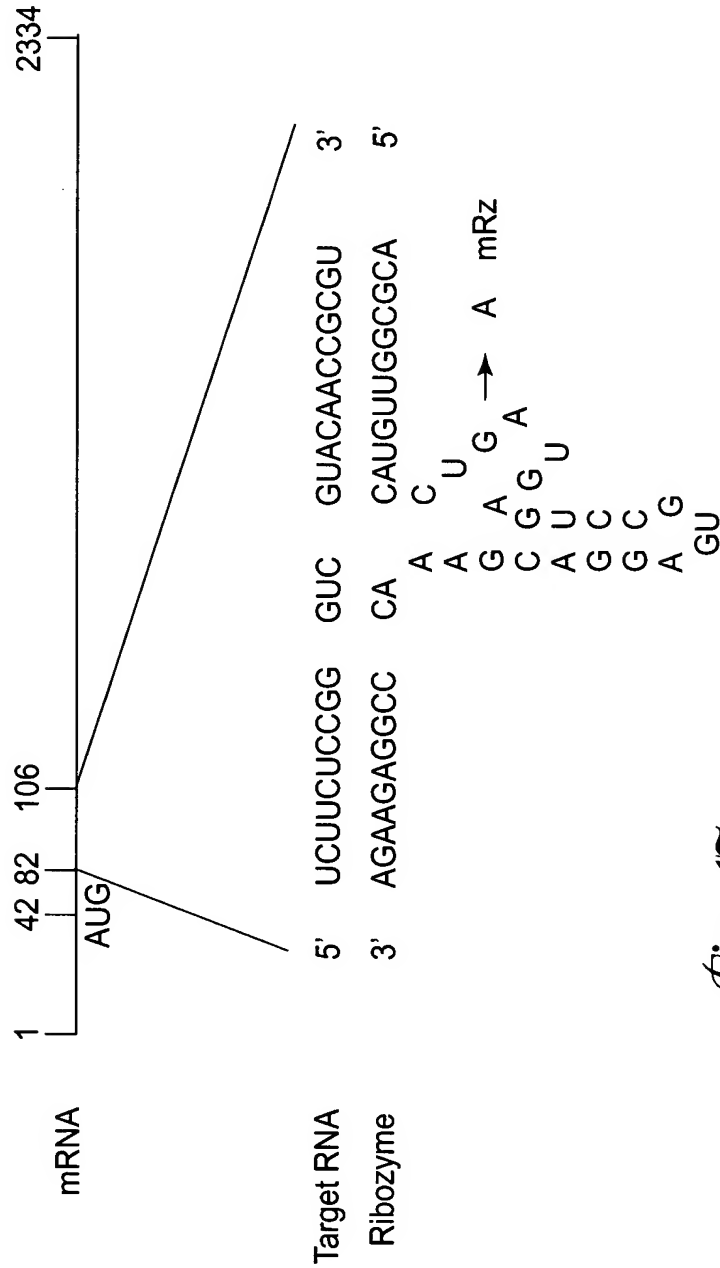


Fig. 17

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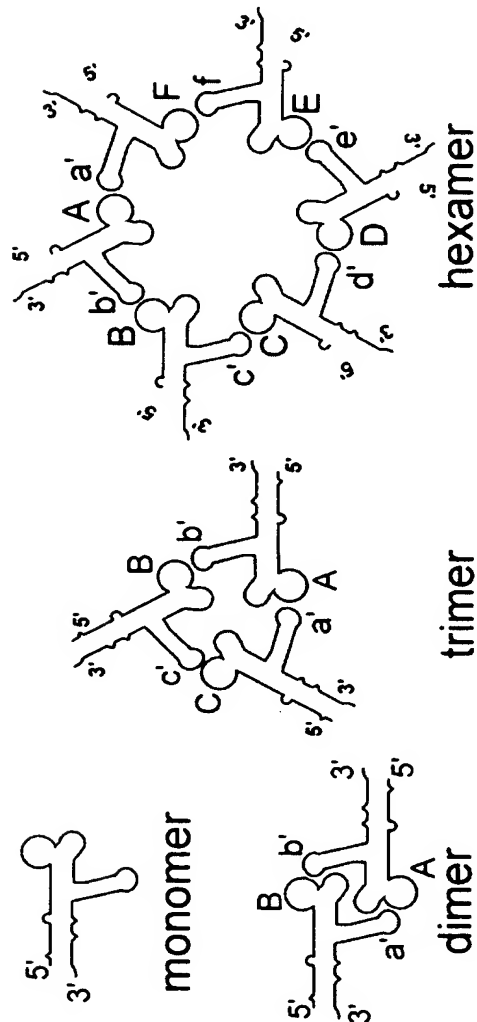


Fig. 18

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Fig. 19a

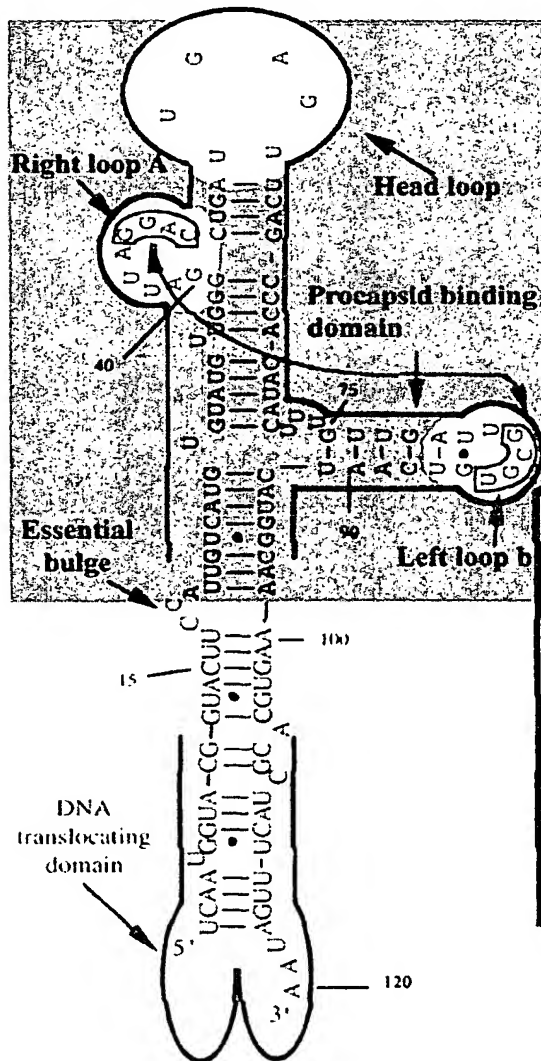


Fig. 19b

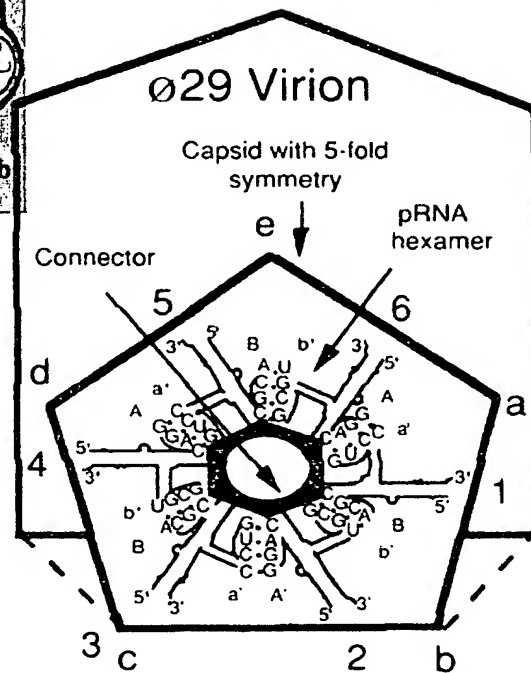
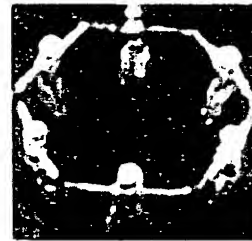


Fig. 19c

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Table A Two Interlocking pRNAs

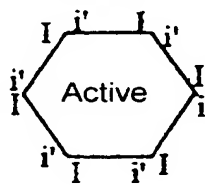
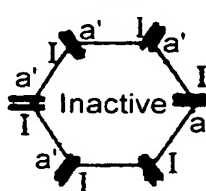
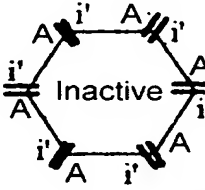
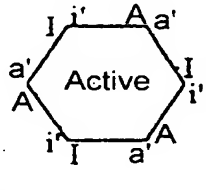
pRNAs	Predicted Hexamer	pRNAs	Predicted Hexamer
I-i' (wild type pRNA)		I-a' (unpaired loop)	
A-i' (Unpaired loop)		(I-a') + (A-i') (Compensatory pair)	

Table B Three Interlocking pRNAs

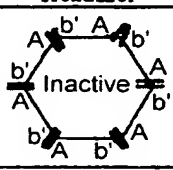
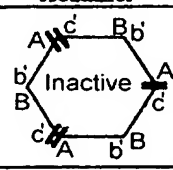
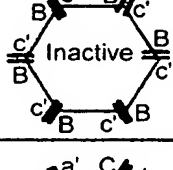
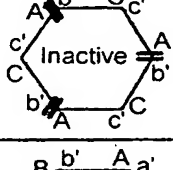
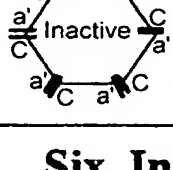
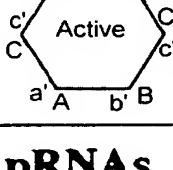
pRNAs	Predicted Hexamer	pRNAs	Predicted Hexamer
A-b' (Unpaired loop)		(A-b') + (B-c') (miss one link)	
B-c' (Unpaired loop)		(A-c') + (C-b') (miss one link)	
C-a' (Unpaired loop)		(A-b') + (B-c') + (C-a') (compensatory trimer)	

Table C Six Interlocking pRNAs

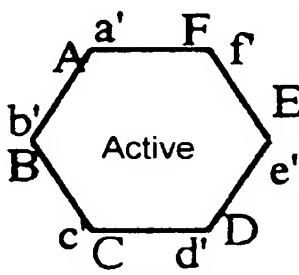
pRNAs	Predicted Hexamer
(A-b')+(B-c')+(C-d')+(D-e')+(E-f')+(F-a')	

Fig. 20

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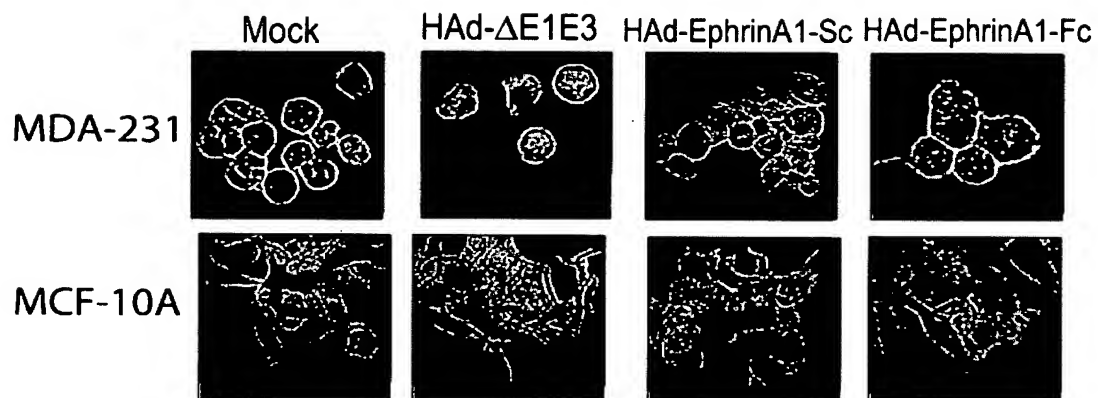


Fig. 21

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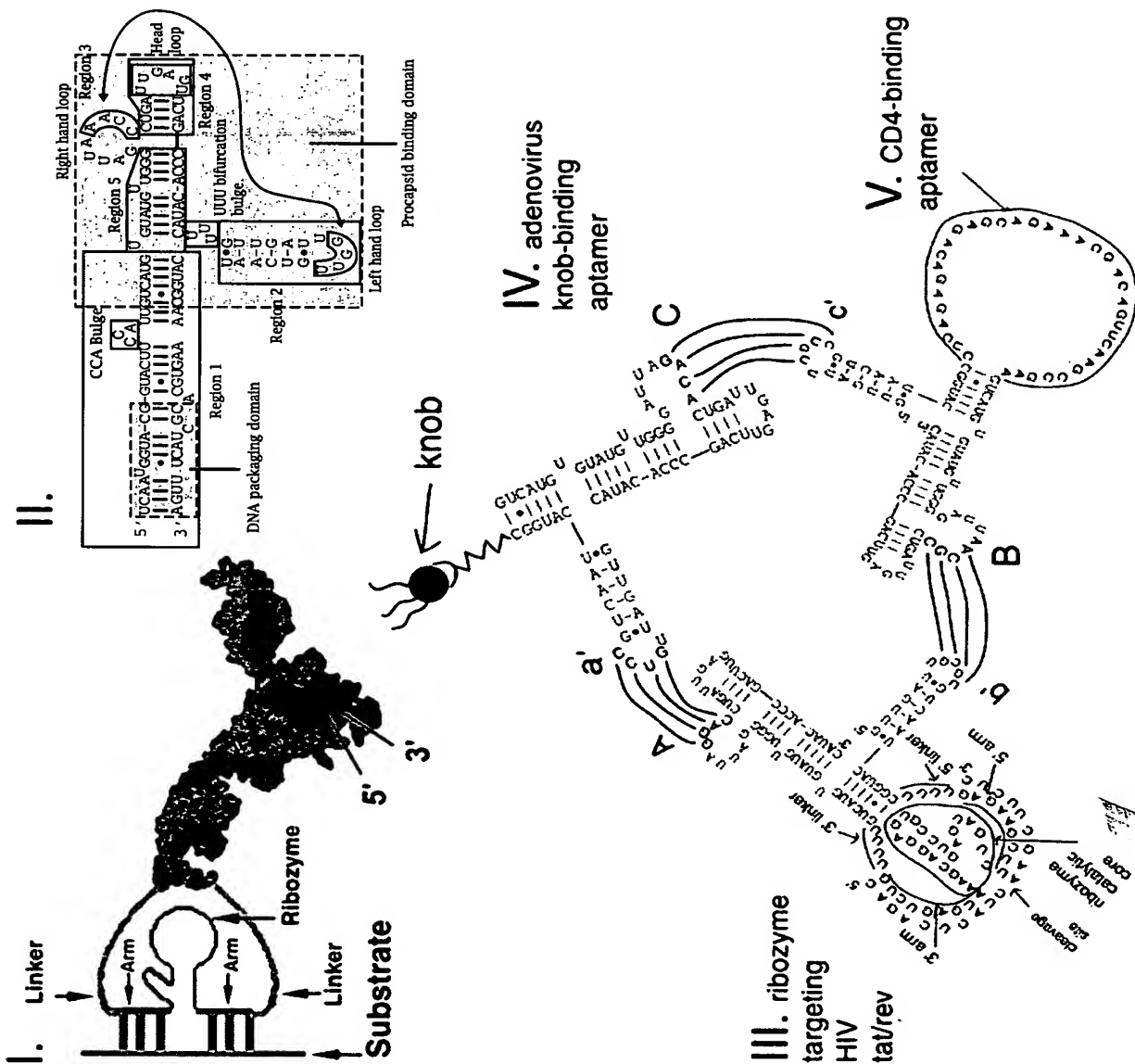
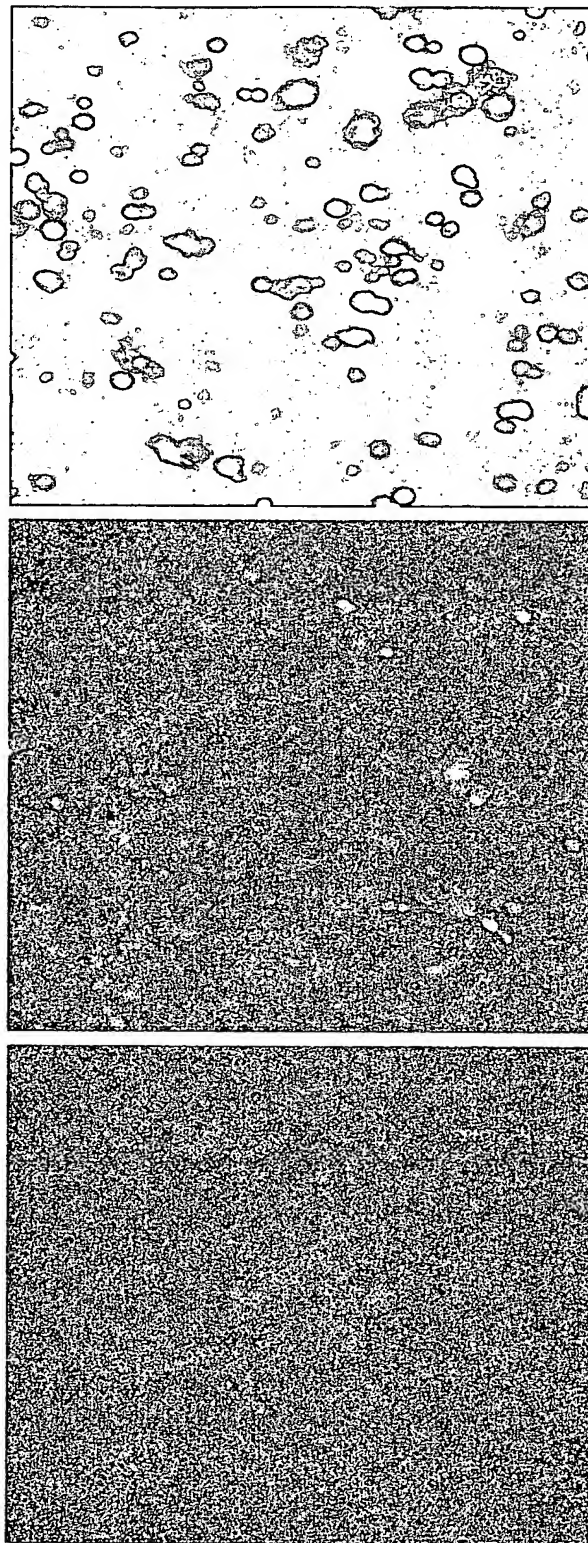


Fig. 22

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Silencing of GFP Gene by siRNA



Chimeric siRNA 21-bp siRNA No siRNA

Fig. 23a

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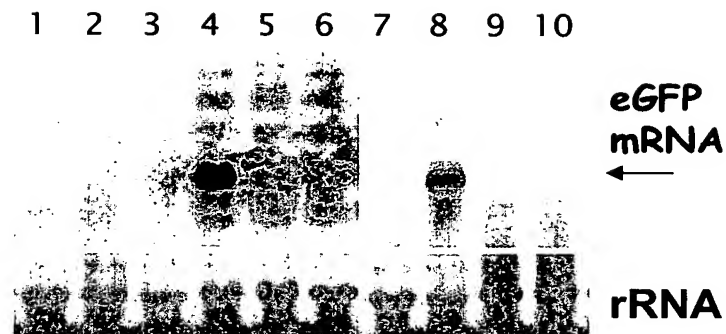


Fig. 23b

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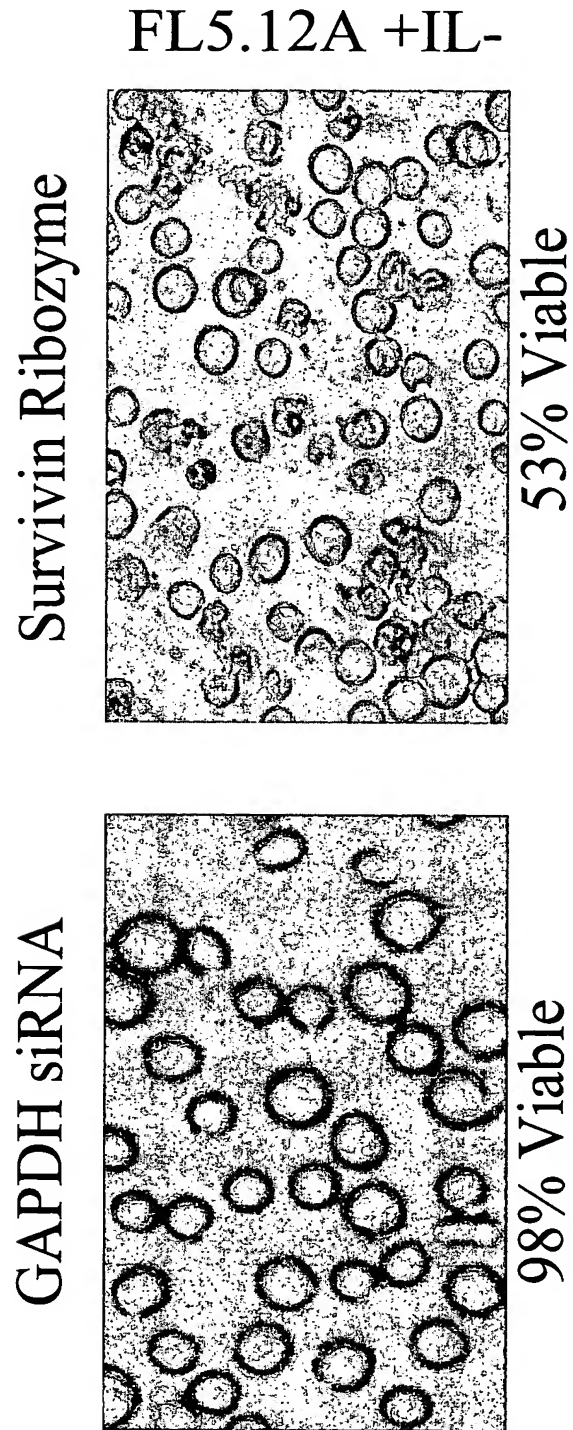


Fig. 24